

LISTING OF CLAIMS

Claims 21 through 60 are pending in the application, and are set forth in the following listing. Pursuant to 37 CFR §1.121(c), the claim listing, including the text of the claims, will serve to replace all prior versions of the claims, in the application.

No Amendments are to the claims. The following listing of the claims is simply being supplied as a courtesy to the Examiner.

21. (Thrice Amended) A negative pressure air bearing slider having a negative pressure cavity, comprising:

a body with a principal surface disposed to confront a recording surface of a recording medium, said principal surface having a lead portion and a rear portion, said lead portion being spaced upstream from said rear portion relative to a rotational direction of any recording medium confronted by said slider, said lead portion having a front edge, said rear portion having a rear edge, said front edge and said rear edge together defining boundaries of said principal surface transverse to said front edge and said rear edge in a longitudinal direction of said slider body; and

a U-shaped air bearing platform spaced-apart from said front edge, said U-shaped air bearing platform circumscribing a majority of said principal surface while defining a negative pressure cavity on said principal surface, said U-shaped air bearing platform comprising not more than two separate air bearing platforms each extending rearwardly toward said rear portion of said principal surface and respectively terminating at a first rear

15 termination and a second rear termination to form trailing terminal ends of said negative
16 pressure cavity spaced-apart from said rear portion, at least one of said not more than two
17 separate air bearing platforms including a sidewall contiguous with one of said boundaries;
18 at least one of said first rear termination and said second rear termination not
19 coinciding with said rear edge, and being disposed upstream of said rear edge relative to
20 said rotational direction of said recording medium.

1 22. The negative pressure air bearing slider according to claim 21, further
2 comprising:

3 a gap disposed within said U-shaped air bearing platform.

1 23. The negative pressure air bearing slider according to claim 22, wherein:
2 said gap is centered with respect to a longitudinal axis of said slider body.

1 24. The negative pressure air bearing slider according to claim 22, wherein:
2 said gap is off-centered with respect to a longitudinal axis of said slider body.

1 25. (Amended) The negative pressure air bearing slider according to claim 21,
2 further comprising:

3 a recessed step disposed within said U-shaped air bearing platform.

1 26. The negative pressure air bearing slider according to claim 25, wherein:
2 said recessed step is centered with respect to a longitudinal axis of said slider body.

1 27. The negative pressure air bearing slider according to claim 25, wherein:
2 said recessed step is off-centered with respect to a longitudinal axis of said slider
3 body.

1 28. The negative pressure air bearing slider according to claim 21, further
2 comprising:
3 a first front air bearing platform; and
4 a second front air bearing platform;
5 said first and said second front air bearing platforms being disposed on opposite
6 sides of said principal surface symmetrically about a longitudinal axis of said slider body,
7 said first and second front air bearing platforms being disposed upstream of said U-shaped
8 air bearing platform relative to a rotational direction of said recording medium.

1 29. The negative pressure air bearing slider according to claim 28, wherein:

2 a tapered surface portion is interposed between said front edge and each of said first
3 and said second front air bearing platforms, the tapered surface portion tapering from each
4 air bearing surface toward said front edge of said slider body.

1 30. The negative pressure air bearing slider according to claim 21, further
2 comprising:

3 a rear air bearing platform accommodating mounting of a transducer, said rear air
4 bearing platform being spaced downstream of said U-shaped air bearing platform relative to
5 a rotational direction of said recording medium, and being centered with respect to a
6 longitudinal axis of said slider body.

1 31. (Thrice Amended) A negative pressure air bearing slider, comprising:

2 a principal surface defining a first plane tangential to a first direction;

3 said principal surface having a lead portion and a rear portion, said lead portion
4 being spaced upstream from said rear portion relative to said first direction, said lead
5 portion having a front edge, said rear portion having a rear edge, said front edge and said
6 rear edge together defining longitudinal boundaries of said principal surface transverse to
7 said front edge and said rear edge in said first direction; and

8 a U-shaped air bearing platform having a plurality of air bearing surfaces embracing
9 a majority of said principal surface while surrounding a negative pressure cavity and
10 defining a second plane tangential to said first direction, said U-shaped air bearing platform

11 comprising not more than two separate air bearing platforms each extending from said lead
12 portion rearwardly toward said rear portion and respectively terminating at a first rear
13 termination and a second rear termination, at least one of said not more than two separate air
14 bearing platforms extending from an edge of one of said boundaries;

15 at least one of said air bearing platforms being spaced-apart from said front edge;
16 at least one of a surface between said first rear termination and said rear edge and a
17 surface between said second rear termination and said rear edge being in said first plane.

1 32. The negative pressure air bearing slider according to claim 31, wherein said U-
2 shaped air bearing platform further comprises:

3 a cross rail portion extending generally laterally across said principal surface.

1 33. The negative pressure air bearing slider according to claim 32, further
2 comprising:

3 a gap disposed within said cross rail portion.

1 34. The negative pressure air bearing slider according to claim 33, wherein:
2 said gap is centered with respect to a longitudinal axis of said slider body.

1 35. The negative pressure air bearing slider according to claim 33, wherein:
2 said gap is off-centered with respect to a longitudinal axis of said slider body.

1 36. The negative pressure air bearing slider according to claim 32, further
2 comprising:

3 a recessed step disposed within said cross rail portion.

1 37. The negative pressure air bearing slider according to claim 36, wherein:
2 said recessed step is centered with respect to a longitudinal axis of said slider body.

1 38. The negative pressure air bearing slider according to claim 36, wherein:
2 said recessed step is off-centered with respect to a longitudinal axis of said slider
3 body.

1 39. (Amended) The negative pressure air bearing slider according to claim 31,
2 further comprising:

3 a first front air bearing platform; and

4 a second front air bearing platform;

5 said first and said second front air bearing platforms being disposed on opposite ends
6 of said principal surface symmetrically about a longitudinal axis of said slider body, said
7 first and second front air bearing platforms being disposed upstream of said U-shaped air
8 bearing platform relative to said first direction.

1 40. The negative pressure air bearing slider according to claim 39, wherein:

2 a tapered surface portion is interposed between said front edge and each of said first
3 and said second front air bearing platforms, the tapered surface portion tapering from each
4 air bearing surface toward said front edge of said slider body.

1 41. (Amended) The negative pressure air bearing slider according to claim 31,
2 further comprising:

3 a rear air bearing platform accommodating mounting of a transducer, said rear air
4 bearing platform being spaced downstream of said U-shaped air bearing platform relative to
5 said first direction, and being centered with respect to a longitudinal axis of said slider body.

1 42. (Thrice Amended) A negative pressure air bearing slider, comprising:
2 a slider having a body with a principal surface disposed to confront a recording
3 surface of a recording medium, said principal surface having a lead portion and a rear
4 portion, said lead portion being spaced upstream from said rear portion relative to a
5 rotational direction of any recording medium confronted by said slider with a longitudinal
6 axis of said slider extending between said lead portion and said rear portion defining a
7 longitudinal direction of said slider and forming a tangent to said rotational direction, said
8 lead portion having a front edge, said rear portion having a rear edge, said front edge and
9 said rear edge together defining boundaries of said principal surface transverse to said front
10 edge and said rear edge in said longitudinal direction of said slider; and

11 a U-shaped air bearing platform defining a negative pressure cavity on said principal
12 surface, said U-shaped air bearing platform comprising not more than two separate air
13 bearing platforms each extending from locations spaced-apart from said front edge and
14 extending rearwardly toward said rear portion of said principal surface and respectively
15 forming a first air bearing surface terminating in a first side wall portion and forming a
16 second air bearing surface terminating in a second side wall portion, at least one of said not
17 more than two separate air bearing platforms including a sidewall extending from one of
18 said boundaries, with said U-shaped platform comprising an arcuately shaped front wall
19 oriented toward said lead portion, at least one of said not more than two separate air bearing
20 platforms extending from an edge of one of said boundaries.

1 43. (Amended) The negative pressure air bearing slider according to claim 42,
2 further comprising a gap disposed within said U-shaped platform.

1 44. The negative pressure air bearing slider according to claim 43, wherein said gap
2 is centered with respect to said longitudinal axis of said slider body.

1 45. The negative pressure air bearing slider according to claim 43, wherein said gap
2 is off-centered with respect to said longitudinal axis.

1 46. (Amended) The negative pressure air bearing slider according to claim 42,
2 further comprising a recessed step disposed within said U-shaped platform.

1 47. The negative pressure air bearing slider according to claim 46, wherein said
2 recessed step is centered with respect to said longitudinal axis.

1 48. The negative pressure air bearing slider according to claim 46, wherein said
2 recessed step is off-centered with respect to said longitudinal axis.

1 49. The negative pressure air bearing slider according to claim 42, further
2 comprising:

3 a first front air bearing platform; and

4 a second front air bearing platform;

5 said first and said second front air bearing platforms being disposed on opposite
6 sides of said principal surface symmetrically about said longitudinal axis of said slider body,
7 said first and second front air bearing platforms being disposed upstream of said U-shaped
8 air bearing platform relative to said rotational direction.

1 50. The negative pressure air bearing slider according to claim 49, further comprised
2 of:

3 a tapered surface portion is interposed between said front edge and each of said first
4 and said second front air bearing platforms, the tapered surface portion tapering from each
5 air bearing surface toward said front edge of said slider body.

1 51. (Amended) The negative pressure air bearing slider according to claim 42,
2 further comprising a rear air bearing platform accommodating mounting of a transducer,
3 said rear air bearing platform being spaced downstream of said U-shaped air bearing
4 platform relative to said rotational direction of the recording medium, and being centered
5 with respect to said longitudinal axis of said slider body.

1 52. (Twice Amended) A negative pressure air bearing slider having a negative
2 pressure cavity, comprising:

3 a body with a principal surface disposed to confront a recording surface of a
4 recording medium, said principal surface having a lead portion separated from a rear portion
5 by a central portion, said lead portion and said central portion being spaced upstream from
6 said rear portion relative to a rotational direction of any recording medium confronted by
7 said slider, said lead portion having a front edge, said rear portion having a rear edge, said
8 front edge and said rear edge connected together by longitudinal sides of said principal
9 surface in a longitudinal direction of said slider body; and

10 a plurality of arcuately shaped arms each having distal ends extending from opposite
11 ones of said longitudinal sides curving inwardly across said central portion of said principal

12 surface with spaced-apart proximal facing ends of said arms together forming a U-shaped
13 air bearing platform located between said longitudinal sides to separate a negative pressure
14 cavity defined by said arms on said principal surface from said longitudinal sides, at least
15 one of said arms extending from an edge of one of said longitudinal sides;

16 at least one of said arms having a proximal end spaced-apart from said front edge;

17 a distal end of at least one of said arms forming a terminal end wholly within said
18 central portion and spaced-apart from said rear portion.

1 53. The negative pressure air bearing slider of claim 52, further comprising a cross-
2 rail portion of said platform extending generally laterally across said principal surface and
3 connecting said proximal facing ends.

1 54. (Amended) The negative pressure air bearing slider of claim 52, further
2 comprising said arms adjoining said longitudinal sides.

1 55. (Thrice Amended) A negative pressure air bearing slider having a negative
2 pressure cavity, comprising:

3 a body with a principal surface disposed to confront a recording surface of a
4 recording medium, said principal surface having a lead portion separated from a rear portion
5 by a central portion, said lead portion and said central portion being spaced upstream from
6 said rear portion relative to a rotational direction of any recording medium confronted by

7 said slider, said lead portion having a front edge, said rear portion having a rear edge, said
8 front edge and said rear edge connected together by longitudinal sides of said principal
9 surface in a longitudinal direction of said slider body; and

10 a plurality of arcuately shaped arms embracing a majority of said principal surface
11 and each having distal ends extending from opposite ones of said longitudinal sides
12 arcuately inwardly across said principal surface with spaced-apart proximal facing ends of
13 said arms together forming a U-shaped air bearing platform located between said
14 longitudinal sides to separate a negative pressure cavity defined by said arms on said
15 principal surface from said longitudinal sides;

16 at least one of said arcuately shaped arms closest to said front edge, being spaced-
17 apart from said front edge;

18 a distal end of at least one of said arms forming a terminal end wholly within said
19 central portion and spaced-apart from said rear portion.

1 56. The negative pressure air bearing slider of claim 55, further comprising a cross-
2 rail portion of said platform extending generally laterally across said principal surface and
3 connecting said proximal facing ends.

1 57. The negative pressure air bearing slider of claim 55, further comprising said
2 arms bordering said longitudinal sides.

1 58. (Twice Amended) A negative pressure air bearing slider having a negative
2 pressure cavity, comprising:

3 a body with a principal surface disposed to confront a recording surface of a
4 recording medium, said principal surface having a lead portion separated from a rear portion
5 by a central portion, said lead portion and said central portion being spaced upstream from
6 said rear portion relative to a rotational direction of any recording medium confronted by
7 said slider, said lead portion having a front edge, said rear portion having a rear edge, said
8 front edge and said rear edge connected together by longitudinal edges of said principal
9 surface in a longitudinal direction of said slider body, said central portion being formed by
10 opposite longitudinal sides separated by a longitudinal center and bounded by said
11 longitudinal edges; and

12 a plurality of arcuately shaped arms each having distal ends extending from opposite
13 ones of said longitudinal sides curving inwardly across said central portion of said principal
14 surface with spaced-apart proximal facing ends of said arms together forming a U-shaped
15 air bearing platform located between said longitudinal sides to separate a negative pressure
16 cavity defined by said arms on said principal surface from said longitudinal sides;

17 said U-shaped air bearing platform being spaced-apart from said front edge;

18 at least one of said distal ends forming a terminal end wholly within said central
19 portion and spaced-apart from said rear portion.

1 59. The negative pressure air bearing slider of claim 58, further comprising a cross-
2 rail portion of said platform extending generally laterally across said principal surface and
3 connecting said proximal facing ends.

1 60. The negative pressure air bearing slider of claim 58, further comprising said
2 arms adjoining said longitudinal edges.